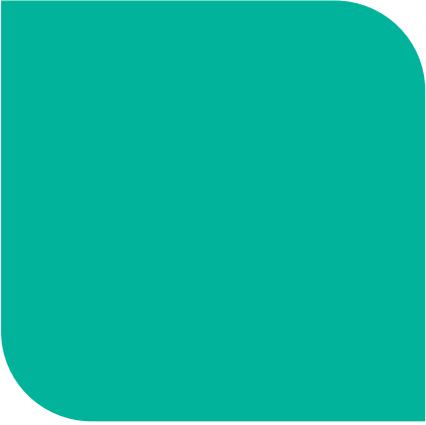


10



Conclusions



10.1 Introduction

This document, the Regional Water Resources Plan North West (RWRP-NW), is the third of four (4) Regional Plans. Together, the four (4) Regional Plans and our Framework Plan form Ireland's first National Water Resources Plan (NWRP). The NWRP allows us to review all our water supplies in a consistent way and to develop a clear approach to move towards safe, secure, reliable, and sustainable public water supplies through prioritised investment in water services over the short, medium and long-term.

The first draft Regional Water Resources Plan for the Eastern and Midlands Region (draft RWRP-EM) was issued for consultation in December 2021. This was followed by the draft Regional Water Resources Plan for the South West Region (draft RWRP-SW) in May 2022. The three-month consultation period for both Plans has now closed.

Uisce Éireann adopted the RWRP-EM in October 2022 following revisions to the draft RWRP-EM to take account of feedback and new data and information received during the consultation period. The adopted RWRP-EM is available at: <https://www.water.ie/projects/strategic-plans/national-water-resources/rwrp/>.

Uisce Éireann adopted the RWRP-SW in February 2023 following revisions to the draft RWRP-SW to take account of feedback and new data and information received during the consultation period. The draft Regional Water Resources Plan for the South East Region (RWRP-SE) was issued for consultation in July 2023.

In the development of the RWRP-NW Uisce Éireann considered relevant government policy and legislation, and a range of external factors which have the potential to impact our water supplies. These include the effects of climate change, increased population growth, economic development and tighter drinking water and environmental standards. The water resources planning process will enable Uisce Éireann to support the sustainable development of our water resources at a regional and national scale.

This RWRP-NW has developed plan level solutions, known as Preferred Approaches, to address the Needs of the 119 Water Resource Zones (WRZs) within the North West Region. The purpose of the Plan is to allow us to understand the scale and type of transformation required across the entire public water supply in terms of achieving our Quality, Quantity, Reliability and Sustainability objectives for existing and future water users.

To understand the current state of our assets and its surrounding environment, the RWRP-NW reviewed the:

- External baseline across the North West Region in terms of natural resources, population growth and economic development, and impacts of climate change; and
- Internal baseline of our existing water supply asset base in terms of capacity and performance of supplies (abstractions and treatment plants) and efficiency of our distribution networks.

10.2 Baseline of the Public Water Supplies in the North West Region

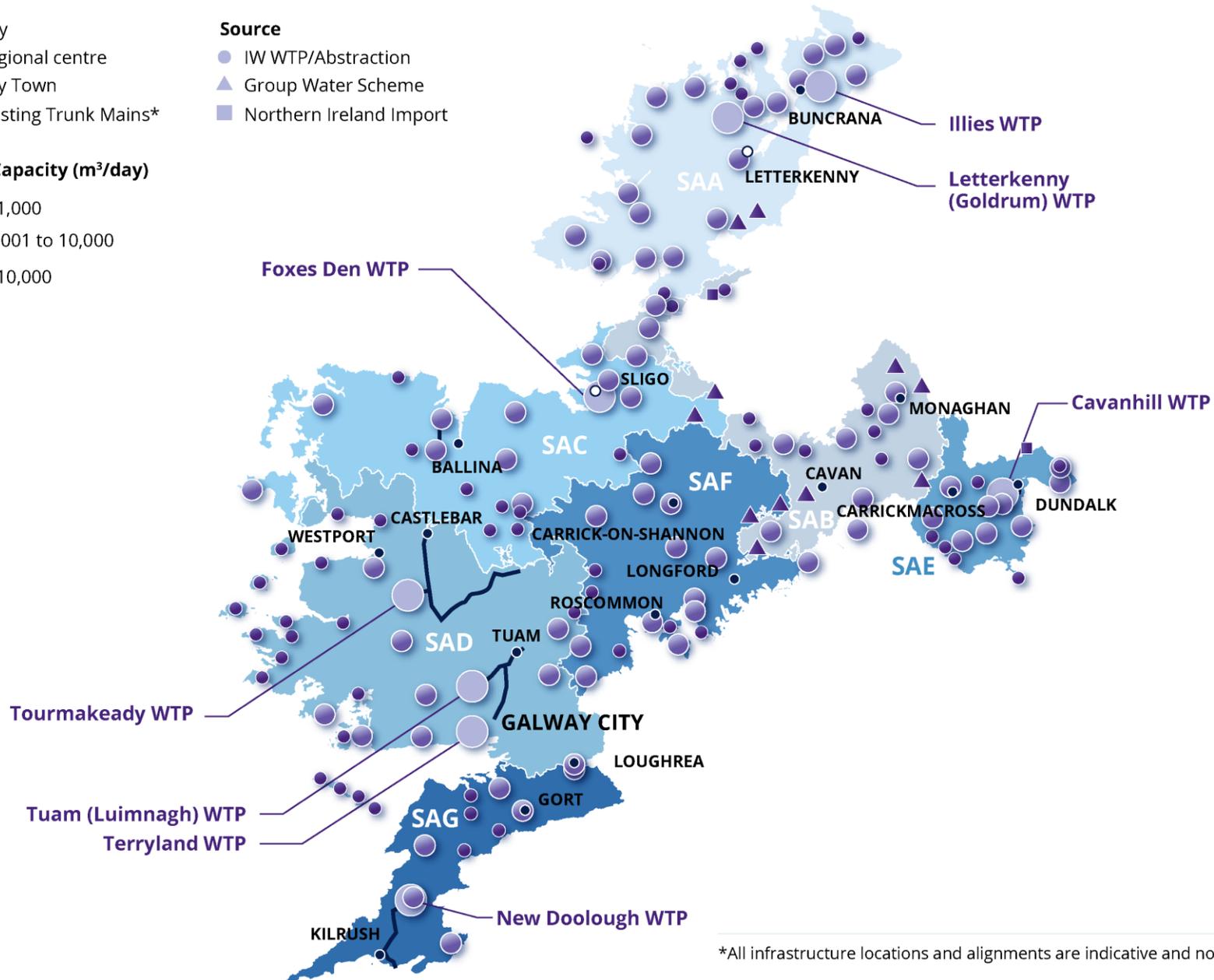
The existing water supply asset base within the North West Region consists of 57 groundwater sources and 102 surface water sources that feed 142 Water Treatment Plants (WTPs). On average 369 million litres per day (ML/d) of water is produced by these WTPs and fed into WRZs within the North West Region. The North West Region has 119 WRZs, 10 of which are currently supplied water from group water schemes (GWS) within the North West Region and four (3) small supplies which obtain water directly from Northern Ireland Water. The distribution network (excluding GWS and Northern Ireland imports) consists of approximately 17,700 kilometres of water mains. The existing WTPs and major interconnecting water pipelines (Trunk Mains) are shown in Figure 10.1.

- City
- Regional centre
- Key Town
- Existing Trunk Mains*

- Source**
- IW WTP/Abstraction
 - ▲ Group Water Scheme
 - Northern Ireland Import

WTP Capacity (m³/day)

- <1,000
- 1,001 to 10,000
- >10,000



*All infrastructure locations and alignments are indicative and not to scale

Figure 10.1 Existing Water Treatment Plants (WTPs) and Major Interconnecting Pipelines (Trunk Mains)

The current Needs across the water supplies in the North West Region can be summarised as follows:

- 30% of the supplies do not meet a 1 in 50-year Level of Service (LoS) in normal weather conditions.
- 45% of the supplies do not meet the 1 in 50 LoS in drought conditions.
- 68% of supplies are associated with a 'high-risk' for one of our Water Quality Barriers and therefore do not conform to the conservative Quality risk reduction standards we have set for ourselves as a water utility.
- Based on desktop assessments, 73 of our supplies may not meet sustainable abstraction levels in the short to medium term.
- Efficiency of our current distribution networks is poor, and it is estimated that approximately 46% of the water that is passed through our watermains in this region is lost through leakage.

We also face the challenges of:

- Facilitating government policy on growth and economic development; and
- Transforming our supplies to ensure that the entire public water supply is environmentally sustainable and adaptable to climate change.

10.3 Plan Development

The purpose of the RWRP-NW is to determine the Preferred Approach and interim solutions we need to transform our water supplies in the North West Region over the short, medium and long-term. The RWMP-NW, as proposed, will achieve the standards we set for ourselves in the Framework Plan, including:

- At least a 1 in 50 LoS across all water supplies in all-weather scenarios including normal, dry, drought and winter conditions. This means that the probability of our customers experiencing a water shortage or severe limitations to supply is 2% in any given year.
- Ensuring that the correct barriers are in place at all our sources, WTPs and within our distribution networks, to reduce risks to water quality to an acceptable level.
- Ensuring that all our supplies are environmentally sustainable and resilient to climate change.

To achieve this, as part of the RWRP-NW we reviewed 1,357 Unconstrained Options to address the identified Needs and took them through the option screening process. This produced a feasible list of 811 Options. We have developed plan level outline designs and costings for all 811 Feasible Options.

The basis of the Feasible Options considered within the RWRP-NW is that they must be environmentally sustainable, technically feasible, promotable and deliverable. The Feasible Options are summarised in Figure 10.2. They cover a broad range of supply types including; supply rationalisation (where smaller water supply systems are decommissioned and connected to larger supply systems), new and increased groundwater and surface water sources, water transfers and desalination.

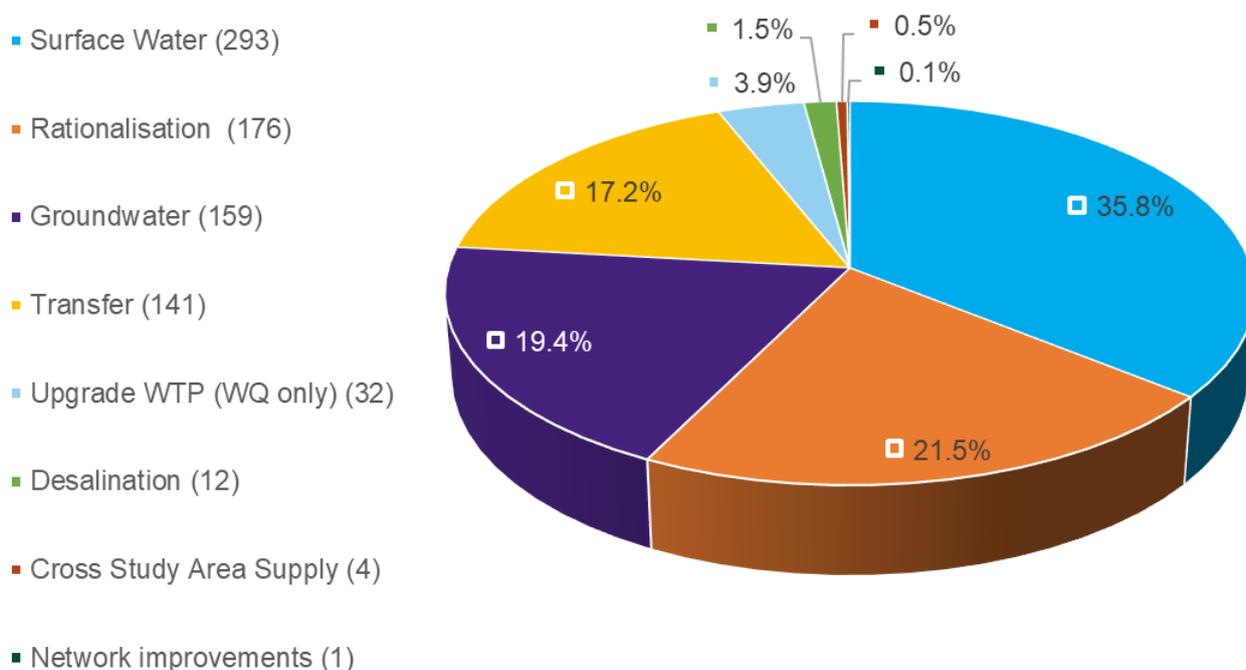


Figure 10.2 Feasible Option Types

The Feasible Options consist of both small local options that are only suitable to address the Need in the immediate vicinity of a supply, and larger Study Area and Cross Study Area Options that can address Need across multiple supplies. We assessed all the Feasible Options to develop the Preferred Approach for each WRZ. The Preferred Approach is the Feasible Option, or combination of Feasible Options, that provide the best overall outcome for the supply in terms of the assessment criteria we set within the Framework Plan. As outlined in Section 7.2, the criteria align with relevant government policy.

Within the Approach Development Process, we applied the resources planning methodology (EBS – Economics of Balancing Supply and Demand) uniformly to rank and appraise the Options. This provided a robust and transparent process to support the selection of a Preferred Approach that represents the best overall outcome against our assessment criteria. In other words, the Plan does not promote particular types of Options. If a small local solution scores best against the Plan and policy objectives (encapsulated by the assessment criteria) our Approach Development Process would present this as the Preferred Approach. Similarly, if a larger Study Area or Regional Option provides a better outcome across a number of supplies, this would be selected as the Preferred Approach.

10.4 Plan Outcome

As set out in Section 8, our Option Development Process for the North West Region did not identify any feasible options with the potential, in terms of quantity and distribution of supply, for a large-scale interconnection of multiple WRZs across the Study Area boundaries. For this reason, the Study Area (SA) Preferred Approach that is presented in Section 7 is identified as the ‘Best Value’ solution to address the regional water supply Need. The Regional Preferred Approach is therefore defined as the combination of the seven (7) SA Preferred Approaches for the North West Region.

The Regional Preferred Approach consists of a combination of local water supply sources and Study Area solutions. These involve:

- Reducing the number of WRZs in the North West Region from 119 to 81;
- Constructing 692 kilometres of trunk mains (diameter > 300mm) to develop larger interconnected WRZs for the urban areas in the region;
- 10 new water treatment plants (WTPs);
- Decommissioning 38 WTPs and 42 existing sources;
- Increasing the barrier performance of the 105 remaining WTPs and upgrading the capacity of 45 of these to address the current supply Deficit and to meet forecast growth; and
- Reducing leakage from the 2019 baseline (46% of regional demand) to 23% of regional demand. (For WRZs with a demand greater than 1,500 cubic meters per day (m³/day), leakage will be reduced to 21% of the average WRZ demand). Leakage reduction will be achieved through pressure management, active leakage control, find and fix and asset replacement.

The outcome of delivering the Regional Preferred Approach as proposed, is that:

- All WRZs in the North West Region will have an improved minimum LoS of 1 in 50 in drought and winter conditions, as well as increased resilience during normal and dry;
- All WRZs will include appropriate barriers to mitigate against water quality risk; and
- All WRZs will be resilient with improved environmental sustainability.

These outcomes are described further in Section 10.5.

10.5 Benefits of the Preferred Approach for the North West Region

10.5.1 Reducing Quantity Risk

If all the Options identified in the Regional Preferred Approach are delivered there will be no supply deficit for any of the WRZs in the North West Region. This means that, following implementation of the RWRP-NW, each WRZ will have enough water in supply (Water Available for Use) to meet peak water demand during all-weather planning scenarios (Normal Year Annual Average (NYAA), Dry Year Annual Average (DYAA), Dry Year Critical Period (DYCP) and Winter Critical Period (WCP)) at a 1 in 50 LoS. This achieves the objectives identified under the Lose Less and Supply Smarter pillars set out in our Framework Plan.

In the North West Region, the supply deficit and forecast growth will be met by 66 local independent supply systems (Figure 7.11). Fifteen (15) new interconnected systems (Figure 7.12) will be created by collectively merging 52 WRZs within the region, including four (4) cross study area interconnections that will assist to connect isolated supplies. The new interconnected supplies will benefit an estimated 42% of the 2044 population. Alongside the existing Galway City scheme, 63% of the regional population will benefit from resilience offered through larger multiple source water supply systems.

The most extensive interconnected systems include:

- An expanded Letterkenny supply, proposing to develop the surface water sources at Eddie Fullarton Pollan Dam, Glen Lough and Gartan Lough sources to supply Letterkenny and settlements on the Fanad Peninsula and Inishowen Peninsula;
- The interconnection of eight (8) WRZs in near Ballyshannon that benefit from a new surface water abstraction from the River Erne, feeding to a new WTP at Knader;
- The expansion of the existing Lough Mask and Westport scheme to connect Kiltimagh and Louisburgh WRZ;

- The proposed interconnection of Ennistymon and West Clare WRZs that will increase abstraction from Doo Lough to address the deficit and support the rationalisation of Killadysert to the West Clare system.

Figure 10.3 displays the four largest interconnected supplies across the region.

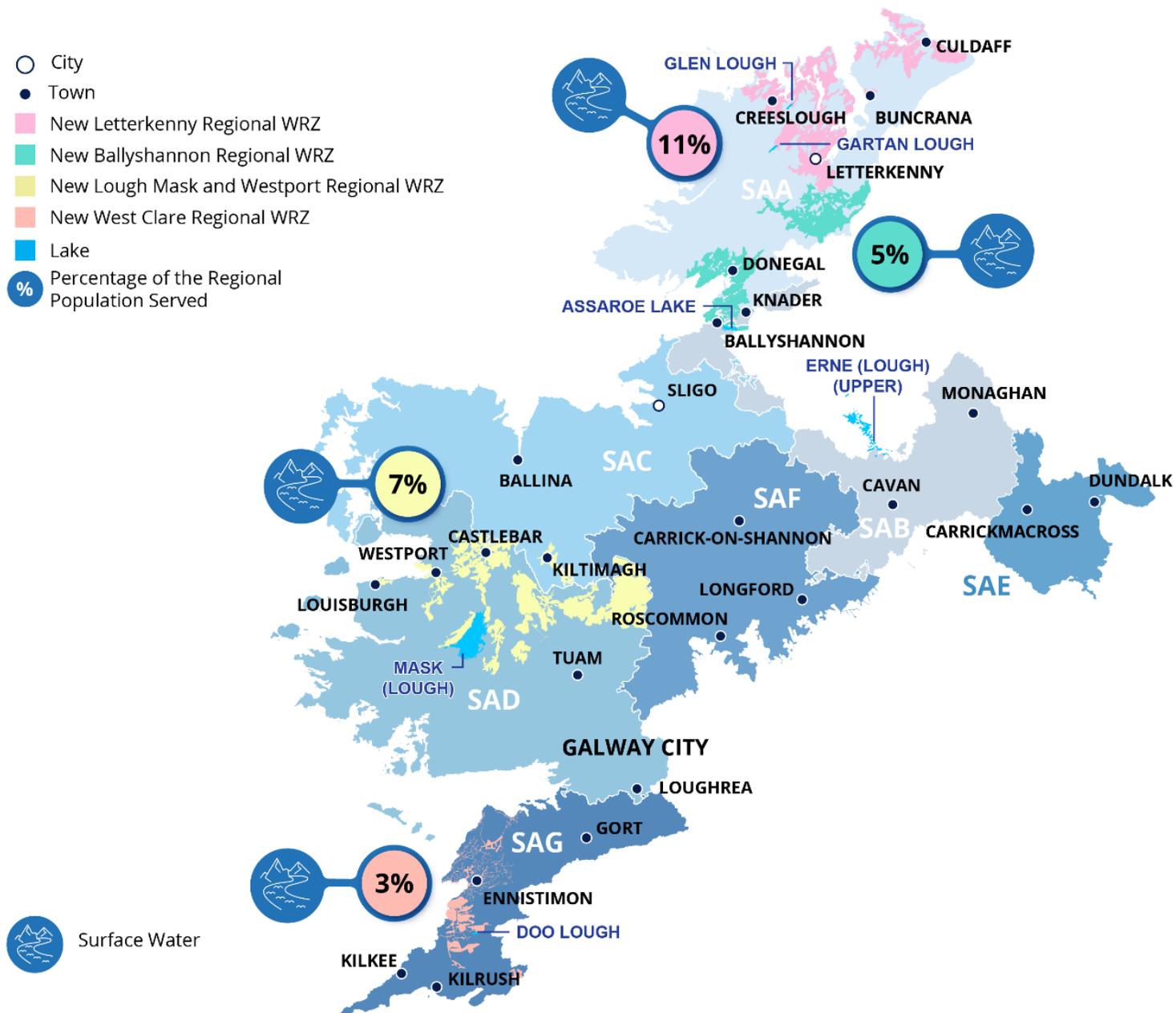


Figure 10.3 Large Interconnected Supplies in the North West Region

As well as the proposed upgraded and new supply sources, the regional Deficit will be addressed by leakage reduction measures. Uisce Éireann has committed to leakage targets beyond the Sustainable Economic Levels of Leakage (SELL) (as outlined in Section 5). The additional targets will reduce leakage levels to 21% of demand in WRZs where demand exceeds 1,500 m³/day. When smaller WRZs with higher leakage targets are considered, this averages to 23% of demand across the region.

Figure 10.4 shows the cities, Key Towns and other settlements that will benefit from the Lose Less Pillar (leakage reduction) of the Framework Plan.

Additional benefits of the Preferred Approach for the North West Region include:

- Each supply will have the appropriate headroom and outage standards to ensure that we can provide a minimum 1 in 50-year LoS to water users. Provision of the 1 in 50 LoS to our customers will reduce the number of outages our customers would typically expect to experience and reduce the frequency of water conservation orders and hose pipe bans required.
- The 15 new interconnected systems will allow us to balance peaking and variability in demand across a larger baseline thus reducing our vulnerability to events such as droughts.
- Overall Quantity risk will also be reduced based on utilising sustainable sources for supplies. This will support population growth and economic development within the North West Region and ensure that the growth targets set by the Regional Assemblies and Local Authorities can be achieved.
- Increased efficiency and economies of scale in delivering leakage reduction measures to large interconnected systems (compared with fragmented systems). This will also result in environmental benefits from energy and carbon savings and reduce pressure on abstractions.

- City
- Town

Leakage Reduction as a Percentage of Demand

- City
- RSES Key Towns*
- Other Towns (with 21% leakage)
- Regional Growth Centre

*Regional Spatial and Economic Strategies (RSES)

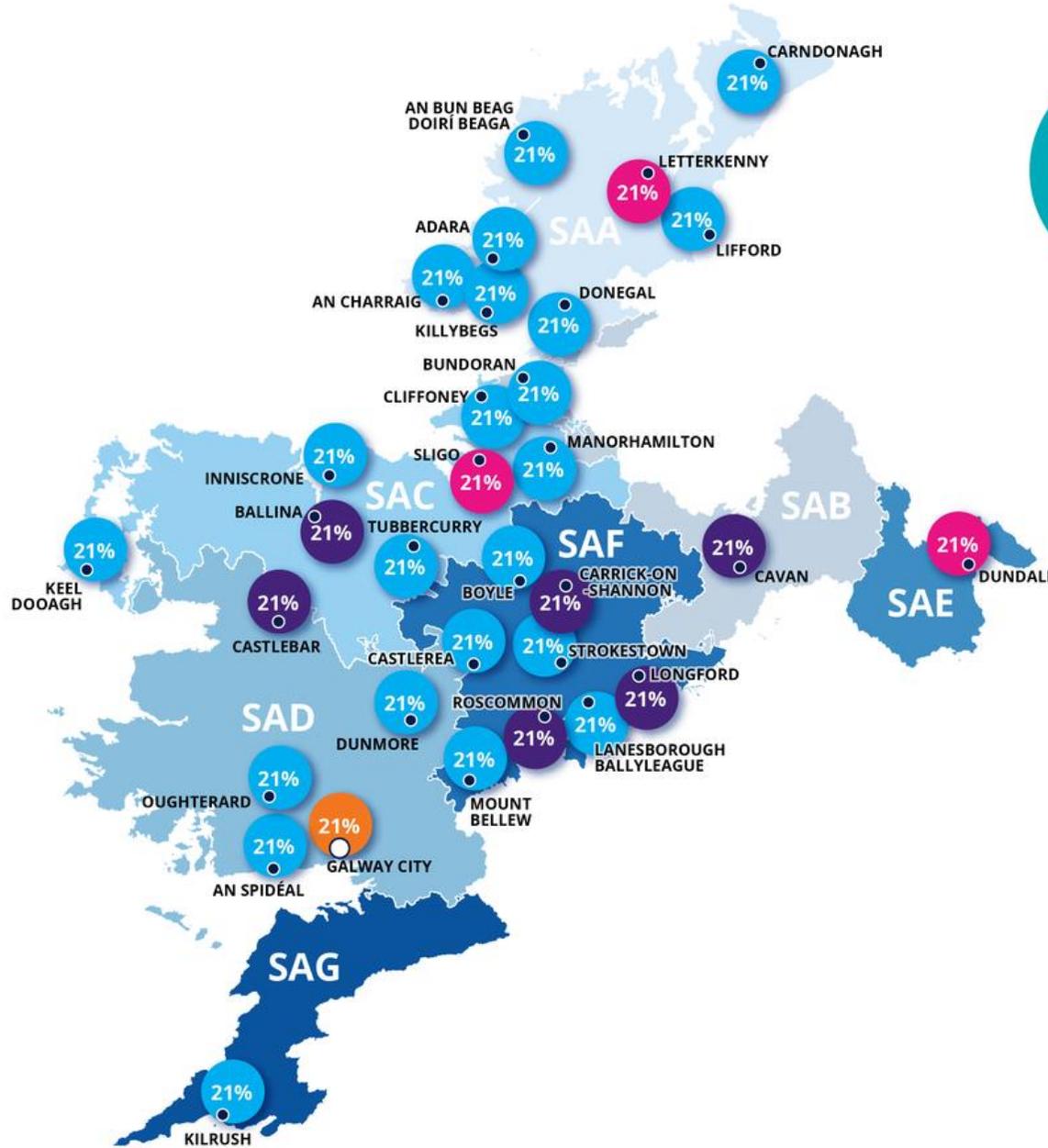


Figure 10.4 Leakage Reduction Targets for the South West Region

10.5.2 Reducing Risk to Water Quality

Although our compliance with the Drinking Water Regulations is over 99%, at present 68% of the 142 WTPs in the North West Region have barrier or alarm deficits when assessed against the risk reduction standards we have set for ourselves as a utility. This means that, in some cases, the treatment assets do not have the capability to fully address Quality risks at all times; particularly after very heavy rainfall, where the raw water quality in our sources may deteriorate significantly for short periods of time.

Quantity and Quality risks are interrelated, as often Water Quality risks are caused or exacerbated by insufficient capacity in our WTPs. For example, having sufficient treatment capacity to allow us to take filters offline for essential repairs results in lower potential risks to Water Quality. For this reason, peaking and outage allowances are included within the Supply Demand Balance and the design standards for future projects within the capital investment plans.

In addition to this, raw water quality can fluctuate significantly based on weather conditions in the natural environment. Controlling Water Quality risk across a very large number of isolated supplies 24 hours per day, 365 days per year can be challenging. Therefore, larger water supplies, which allow for more focussed operational controls and monitoring, can help address this risk. The effectiveness and efficiency of larger supplies with improved interconnectivity is evidenced in the majority of other EU jurisdictions, many of which have far fewer WRZs despite having larger populations.

Where it is not possible to interconnect systems due to the isolated location of the WRZ or the potential environmental impact of associated construction work or operations, we have developed smaller local supplies. For these smaller systems, we manage operational risk by selecting sources that are less susceptible to large variations in water quality with good source protection.

When the Options identified in the Regional Preferred Approach are delivered there will be no barrier deficit at any of the WTPs in the North West Region. Therefore, the risk of drinking water non-compliance or boil water notices will be significantly reduced.

In the North West Region this will be achieved via delivery of 10 new WTPs, capacity and barrier performance upgrades to 45 existing WTPs and barrier performance upgrades to a further 59 existing WTPs. In addition to the capital works, source protection measures and development of full Drinking Water Safety Plans for each supply will allow for appropriate and continuous risk management in accordance with the requirements of the recast Drinking Water Directive.

Additional Water Quality benefits of the Preferred Approach include:

- The creation of 15 new interconnected systems. This will decommission 38 existing WTPs. The reduced number of WTPs will allow tighter management and operational controls over water quality. This will in turn enable targeted investment in the maintenance of a smaller amount of infrastructure. As an example, the expansion of the Letterkenny sources will decommission 7 WTPs and create a network of 8 remaining WTPs serving approximately 100,000 customers in the North West Region by 2044. The interconnected network will also include four (4) new raw water storages and 11 new treated water storages that will enable plant shutdowns and trunk main repairs, while maintaining supplies to customers.
- Small new or upgraded local groundwater sources will supply 19 WRZs that meet 6% of the estimated 2044 regional demand. These sources have been selected based on water availability, sustainability, natural storage and stable raw water quality. The Preferred Approach for these WRZs will also involve appropriate source protection, treatment barriers and treated water storage specific to each WRZ. Therefore, the operational vulnerability of having a larger number of small supplies will be offset by utilising secure and stable sources.

- Twenty (20) WRZs will be supplied by new or upgraded local surface water sources that will serve 39% of the estimated 2044 regional demand. The Water Quality risk to these systems will be managed using correct treatment barriers within the new and upgraded WTPs, including appropriate plant shut down and strategic storage. In most cases, these non-interconnected surface water supplies have been selected as there is no groundwater availability in the area. As the Preferred Approach progresses towards project level, we will investigate whether there are further nature-based solutions that can improve the risk profile of these sources. An example of this would be to investigate the feasibility of an infiltration gallery or abstraction from riverbed gravels as an option on a standard intake. Such solutions can improve the stability of raw water, particularly after storm events.

10.5.3 Reliability and Sustainability

In the North West Region, Uisce Éireann currently abstracts from 159 different water sources and has 142 WTPs which collectively serve 732,700 people or 18% of the national population; all of which need to be maintained and operated in a sustainable manner. Surface water abstractions make up 88% of the water delivered to customers, either from rivers or lakes, with the remaining 12% from groundwater sources. These surface water and groundwater interactions are an important consideration when identifying options to support increased water demands and in managing the water quality we supply.

Some of the highest areas of rainfall across Ireland occur in the North West Region. The west of the Region typically experiences average annual rainfall greater than 1,200 mm. In some western areas rainfall can reach up to 2,800 mm per year. In comparison, some of the eastern areas of the region can experience less than 800 mm of rainfall per year. Galway, Ballina, Sligo and Letterkenny, areas which have the greatest population density, are situated in areas of lower rainfall meaning that the most populated areas are at risk of becoming water stressed. Water supply reliability is further impacted by adverse weather conditions including storms, cold weather conditions and dry periods. Due to climate change it is likely that over time in Ireland we will encounter wetter and stormier conditions at certain times of the year, and prolonged dry periods at other times of the year. Therefore, the reliability and sustainability of our sources will become more reliant on appropriate storage in the natural environment over time.

Sustainability issues are also not just a result of climatic conditions. In Ireland, many of our water supplies were developed in a piecemeal manner over time, with water sources based on proximity to the populations they served. As towns and villages have grown in size over time, it has meant that some of these supply sources now have sustainability issues, particularly in dry weather.

Under the Water Framework Directive (WFD), Ireland must ensure that all waterbodies achieve ‘Good’ status by 2027. As outlined in Section 2.3.7, the Government is currently developing new legislation that will introduce abstraction licensing to align with the WFD. This legislation will set the amount Uisce Éireann can take from the water supplies that it abstracts water from. Uisce Éireann lacks comprehensive data to fully understand the impact of the pending legislation on many of its abstractions. Uisce Éireann is building a telemetry system that will aid bringing all this data together (as it was historically collected by individual local authorities), but this will take time. Therefore, improved monitoring and gathering better data is a priority. On an interim basis, Uisce Éireann has developed an initial desktop assessment based on available information. This conservative assessment is used to identify existing surface water sites where abstractions may exceed sustainable abstraction thresholds and to identify sustainable future sources. This assessment was used in developing our Preferred Approach for the North West Region.

In addition to this, the assessment criteria used in our approach appraisal process has been developed using the objectives of the Strategic Environmental Assessment. This means environmental sustainability is built into the core of our plans and that all Feasible Options and Preferred Approaches

have been assessed as being sustainable at plan level. This will be further assessed at project level, as the projects identified within the Preferred Approach progress.

The Preferred Approach for the North West Region is reliable, sustainable and resilient to climate change, based on the following:

- The process of assessing performance of existing and future abstractions is based on conservative standards on water availability.
- The Feasible Options must be assessed to be sustainable at a plan level.
- The approach appraisal process utilises a multi criteria assessment where the assessment criteria are based on the objectives of the Strategic Environmental Assessment.
- With the Preferred Approach in place, approximately 67% of the 2044 demand will be supplied by interconnected systems (including the existing Galway City Scheme). This will provide operational flexibility and increased resilience. Local groundwater systems will supply 9% of the 2044 demand. These systems improve reliability through the natural storage of aquifers. Twenty-three (23%) of the demand will be supplied from local sustainable surface water sources. The remaining 1% will be supplied by Group Water Supply schemes and a small import from Northern Ireland.
- The number of sources will reduce from 159 to 117 through supply rationalisation. This provides the benefit of abandoning 28 potentially unsustainable surface water abstractions. Twenty-two new abstractions will be developed from sustainable sources.

The reliability of our water supplies is also dependent on the standard of our network infrastructure. The Study Area Technical Reports (Appendices 1-7) outline a number of vulnerable critical assets within each Study Area. These critical assets will be replaced or rehabilitated as part of the development of the Preferred Approach, reducing the risk of outage across our supplies.

10.5.4 Transformation

The development of the RWRP-NW allows Uisce Éireann for the first time to review water supply needs collectively across the North West Region and across the entire spectrum of risk including Quality, Quantity, Reliability and Sustainability. It allows us to consider local options to resolve these Needs and larger Study Area and Regional options that can address multiple supplies.

The Plan allows us to move away from reactive management of risk at a single source or for a single Need (e.g., Quality risk alone), to a more holistic view of the transformation required across all of our supplies to meet the objectives set out in the Water Services Strategic Plan (WSSP) and the Water Services Policy Statement (WSPS). The WSSP is Uisce Éireann Strategic Plan which is a plan required under statute and sets out Uisce Éireann's business objectives in terms of water and wastewater services. The WSPS 2018-2025, is the Governments policy document on water services.

The Regional Preferred Approach for the North West Region will result in almost 44% of the population being served by interconnected WRZs. The four largest of these include the expanded Letterkenny, Ballyshannon, Lough Mask and West Clare system. Combined, these four systems alone will serve an estimated 26% of the regional population and meet 30% of the forecast Demand by 2044.

The RWRP-NW provides:

- An understanding of, *inter alia*, the current state of our infrastructure, the potential Sustainability of our supplies, potential Water Quality issues, the location and Quantity of potential new sources and the settlements they can supply, the additional settlements that existing abstractions can supply and where investment is needed and its priority.
- A high degree of flexibility in our plans, particularly in terms of domestic and non-domestic growth. For example, our baseline figures for non-domestic growth include high growth in water demand in Galway City and the regional centre of Sligo, and medium growth in the Key Towns. Having an interconnected network allows us to facilitate and support higher growth in the smaller connected settlements within the North West Region, if Need manifests itself in that way over time.
- More balance across the North West Region, with the abstractions for regional supplies balanced across all of the major catchments of the region. Water abstraction to support public water supply will become more sustainable and resilient to future shocks such as drought and climate change.
- Improved risk management achieved by interconnecting supplies and reducing the number of water supply systems to operate and maintain. Where it is not possible to merge WRZs through interconnected supplies, we will manage risk by selecting secure protected water sources and appropriate treatment barriers.
- An understanding of the transformation required across our water supplies, to ensure that we can have reliable and sustainable supplies into the future.
- An understanding of the scale and asset type we require to ensure quality and that our customers receive the required Quality and Quantity.
- A combination of solutions - Lose Less, Use Less and Supply Smarter.
- The investment required over the short, medium and long term to transform our supplies.
- A sensitivity assessment that allows us to test the Preferred Approach against a range of future scenarios.

10.5.5 Alignment with Policy

The Framework Plan was designed to align with all relevant government policy, including policy on water services, growth and economic development, the environment, climate change adaptation and public spending. The Preferred Approach identified within the RWRP-NW therefore aligns with the government policy framework and Uisce Éireann's own internal policies and standards for our water supplies.

10.5.6 Alignment with Investment Planning

The adoption of the RWRP-NW, along with the RWRP-EM and RWRP-SW and the upcoming Regional Water Resources Plan for the South East, will identify the Preferred Approach to address Quality, Quantity, Reliability and Sustainability issues for every WRZ in Ireland. Therefore, the NWRP will provide the foundation for understanding the strategic investment requirement to transform our water supplies and will drive our future investment plans for water services.

Uisce Éireann will prioritise this capital need utilising a Value Framework to ensure the projects that offer the most value to our customers is progressed first. The future forecast for capital investment will be built on that basis. This will result in a 40-year Investment Plan that includes accurately scoped and appropriately prioritised capital projects.

10.6 Alternatives to the Plan

During the Study Area Level assessment process outlined in Section 7, the Feasible Options were compared to see whether any Study Area or Regional Options were available to meet the Need across multiple WRZs. For some Study Areas this led to the identification of Preferred Approaches which involve a cross study area transfer.

For the Regional Level assessment, the potential Preferred Approach has been reviewed further to consider potential for any additional alternative combinations at this level. The potential for large feasible options with the capability to provide regional interconnectivity is limited by a combination of: terrain; potential impacts of construction on designated sites; the volume of water we can sustainably abstract from water sources; and the cost and challenge of transporting small volumes of water across long distances. The Preferred Approach for each Study Area does however comprise some large, interconnected supplies and in this way provides the benefit of resilience and improved environmental outcomes, through the decommissioning of unsustainable sources.

10.7 Interim Options

Given the significant issues with the baseline supplies in terms of Quality, Quantity, Reliability and Sustainability, the “do nothing” approach is not feasible. Need will also get worse over time due to growth in demand and reduction in supply availability and resilience due to climate change.

It may take a considerable period of time to deliver the Preferred Approach across all supplies within the North West Region due factors such as:

- Scale of Need across all WRZs;
- Likely minimum project lead-in times; and
- Uisce Éireann’s current capital funding arrangements.

Therefore, Uisce Éireann also recognises the need for localised, shorter-term interventions within existing supplies to address critical water Quality risk and supply Reliability issues before the Preferred Approach can be implemented in full. Accordingly, within the RWRP-NW we have also developed an “interim solution” approach, which allows such interventions to be identified and prioritised. As a general principle, this interim approach envisages shorter term improvements to existing infrastructure and equipment. These interventions are not intended to deliver a long-term solution to supply and water quality issues. They are generally smaller in scale and rely on making best use of existing infrastructure to meet urgent or priority need to address water Quality risk or supply Reliability. The interim solutions are determined in line with the Preferred Approach and as such, they are considered “no regrets” infrastructure investment. The Interim Options are outlined in Technical Appendices 1 to 7 and summarised in Section 7.6.

10.8 Conclusions

The existing public water supply in the North West Region serves a population of 732,700 people, and 74,000 businesses. The Region is split into 119 WRZs, 10 of which are currently supplied water from Group Water Schemes (GWS) within the North West Region and four (4) small WRZs receiving a supply directly from Northern Ireland Water. The water supplies in the North West Region require significant transformation and investment to meet the requirements of safe, secure, reliable and sustainable water supply.

The Framework Plan set the standards we must achieve to meet Uisce Éireann’s objectives as set out in the WSSP. It also developed the methodology we would use to identify the Preferred Approach to resolve Needs across our water supplies.

Within the RWRP-NW we summarised the Need across the 119 supplies and identified the Preferred Approach at Regional Level to address these Needs. Delivery of the Preferred Approach will provide the best overall outcome for the region in relation to environmental, ecological and resilience outcomes and will result in:

- Transformation of water services in the region from a fragmented supply system with large variation in levels of service, to an interconnected supply with uniform and improved level of service.
- Customer benefits in terms of increased Reliability and reduced occurrence of outages across our supplies.
- Customer benefits in terms reduced water Quality risk and instances of boil water notices.
- Improved resilience, through interconnected sources that will provide operational flexibility, allowing us to manage seasonal variation in water availability and drought events.
- Sources that are more environmentally sustainable and allow us to adapt to climate change and align with the requirements of the Water Framework Directive and Habitats Directive.
- Improved operational control across our water supplies, and ability to react to adverse events.
- Improved efficiency of our distribution networks in terms of leakage, pressure and strategic storage.
- Ability to facilitate growth and economic development.

10.9 Next steps

SEA requirements and consultation comments have been taken into account in finalising the Regional Plan. Responses to the consultation are reported in the Post Consultation Report. In addition, the SEA Environmental Report has been updated to take account of amendments to the RWRP-NW and comments received through the consultation process.

Further consultation on the remaining South East Regional Water Resources Plan, including corresponding SEA Environmental Reports and Natura Impact Statements, is currently being undertaken.

Following on from the public consultation, submissions and observations received will be taken into consideration before adopting the final RWRP. Once the first NWRP has been finalised, it will be comprised of the Framework Plan and the four (4) Regional Water Resources Plans and together they will be treated as a unified Plan.

The NWRP will ensure that there is a transparent Framework Plan and Regional Water Resources Plans to allow Uisce Éireann to provide a safe, secure, reliable, and sustainable water supply now and into the future. This will be used to inform future regulated capital investment plans and operational plans.